Discoveries/Inventions of Regional Research Laboratory, Jorhat

2323. SHRI DRUPAD BORGOHAIN: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) what are the details of major discoveries or inventions of Regional Research Laboratory, Jorhat, during the last ten years; and

(b) whether Government have any plan to extend the activities of Regional Research Laboratory in the near future?

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT AND MINISTER OF SCIENCE AND TECHNOLOGY (DR. MURLI MANOHAR JOSHI):

(a) During the last ten years Regional Research Laboratory (RRL), Jorhat have developed a number of technologies, the major among them are listed in the *statement.* (*See* below)

(b) In order to strengthen the Research and Development activities of RRL, Jorhat, a modernisation plan worth around Rs. 500 lakh has been taken up to enable it to meet more effectively the Science & Technology demands of the North-East region.

Statement

Major technolgies developed during last ten years

(i) Drugs & Pharmaceuticals
Arteether from commercial artemisinin, a novel anti-malarial drug effective against primaquin resistant malaria;

(ii) *Cement & Minerals*
— 50 TPD Mini cement plant using vertical shaft kiln technology;
— Ferrocement elements for low cost roofing, storage tanks etc;
— Design/prototype for agglomeration and grannular products;

(iii) *Medicinal and aromatic plants*
Agrotechnologies for cultivation of aromatic oil bearing plants namely Patchauli, Cymobopogon citratus and Annato;

(iv) *Utilisation/disposal of agricultural and other wastes*
— File cover, file board, duplex board from agricultural/cellulosic wastes;
— Design/prototype for disposal of solid wastes;
— Fibre from banana stem;

(v) *Miscellaneous*
— High strength proppant;
— Liquid deodorant;
— Multi purpose valve;

CAG'S Comments on Standard Manpower policies Evolved by CSIR

2324. SHRI GAYA SINGH: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Comptroller and Auditor General of India(CAG), in its report No. 5 of 1998, pinpointed lapses in evolving standard manpower policies in the council of Scientific and Industrial Research (CSIR); and

(b) if so, whether the CAG covers the trends in expenditure relating to manpower, issues relating to manpower planning, recruitment, deployment and promotion in National Institute of Science, Technology and Development Studies (NISTADS), CSIR?

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT AND MINISTER OF SCIENCE AND TECHNOLOGY (DR. MURLI MANOHAR JOSHI):

(a) Yes Sir.

(b) No Sir.